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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,535	03/15/2004	Sujal M. Patel	RN 25C1 (2635-024-05)	1306
72455 7590 07/27/2009 Graybeal Jackson Haley c/o RealNetworks Graybeal Jackson Haley LLP 155 - 108th Ave NE Suite 350 Bellevue, WA 98004-5973				
EXAMINER				
NGO, NGUYEN HOANG				
ART UNIT		PAPER NUMBER		
2416				
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07/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,535

Applicant(s)

PATEL ET AL.

Examiner

NGUYEN NGO

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This communication is in response to the amendment of 4/28/2009. All changes made to the Claims have been entered. Accordingly, Claims 1-52 are currently pending in the application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 27 recite the limitation of wherein the base time comprises a previous determination of the transmission time for a data packet. Examiner urges applicant to specifically point out such subject matter. It should be noted that figure 3 shows the base station = clock time – timestamp.
3. Claims 28, 29, 38, 39, 47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application

was filed, had possession of the claimed invention. Claims 28, 29, 38, 39, 47 recite the limitation of modifying the base time comprises subtracting from the base time the most recently obtained transmission time/absolute transmission time. Examiner urges applicant to specifically point out such limitations, as the specification discloses modifying the base time using the latency (seen from figure 3). Claims 29, 39, 47, further recite the limitation of modifying the base time in response to the transmission latency being less than 0, wherein modifying the base time comprises subtracting from the base time the absolute value of the most recently determined transmission time. However as seen in the Specification (page 12 [0041]), recites that if base time > 0 then base time = base time - absolute value of latency, which is different then what is claimed.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 27 recite the limitation of wherein the base time comprises a previous determination of the transmission time for a data packet. Examiner urges applicant to specifically point out such subject matter. It should be noted that figure 3 shows the base station = clock time – timestamp.
6. Claim 28, 29, 38, 39, 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. Claims 28, 29, 38, 39, 47 recite the limitation of modifying the base time comprises subtracting from the base time the most recently obtained transmission time/absolute transmission time. Examiner urges applicant to specifically point out such limitations, as the specification discloses modifying the base time using the latency (seen from figure 3). Claims 29, 39, 47, further recite the limitation of modifying the base time in response to the transmission latency being less than 0, wherein modifying the base time comprises subtracting from the base time the absolute value of the most recently determined transmission time. However as seen in the Specification (page 12 [0041]), recites that if base time > 0 then base time = base time - absolute value of latency, which is different then what is claimed.

7. Claims 38, 39, 46, 47, 49, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 38, 39, 46, 47, 49, recite "wherein, to determine the base time". However there is no determination step of a base time in the independent claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-27, 30-37, 40-45, 48, 50-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Jain (US 6259677), hereinafter referred to as Jain.

Regarding claim 1, 6, 11, 16, 20, 27, 31, 32, 37, 45, 50, 51, 52, Jain discloses a method of determining network conditions (clock synchronization and dynamic jitter management for real-time data in which uses delay estimators at the receiver, abstract and col3 lines 35-42), the method comprising:

Determining a transmission time equal to a clock time minus a time stamp associated with a data packet (receive_clock – timestamp, col6 lines 20-33 and col5 lines 46-50);

subtracting a base time (fixed_delay) from the transmission time to determine a transmission latency (packet_jitter = receive_clock - timestamp - fixed_delay, col6 lines 25-30); and

modifying the base time in response to the transmission latency being less than zero (if(packet_jitter < 0), col6 lines 30-35).

Regarding claim 2, 12, 21, 23, 24, 25, 26, 33, 34, 35, 36, 41, 42, 43, 44, Jain discloses the method of claim 1, wherein determining the transmission time includes:

reading the timestamp included in the data packet, wherein the timestamp includes the time that the data packet was sent (send timestamp ts, col5 lines 40-45);
and

modifying the time of the timestamp to account for any clock skew (contains the offset between the unsynchronized send and receive clocks, (col5 line65-col6 line 5).

Regarding claim 3, 7, 8, 13, 17, 22, Jain discloses the method of claim 1, additionally comprising reporting to a software module the transmission latency (be implemented as a programmed microprocessor, col6 lines 13-20).

Regarding claim 4, 9, 14, 18, Jain discloses the method of claim 1, wherein the data packet is one of a plurality of data packets that collectively comprise a portion of a media presentation rendered to a user (each packet i and in which the invention pertains to methods and systems for communication of real-time audio, video and data signals over a packet switched data network, col5 lines 45-50 and col1 lines 5-11).

Regarding claim 5, 10, 15, 19, Jain discloses the method of claim 4, wherein the plurality of data packets are received via a modem (receiver, col4 lines 45-51).

Regarding claim 30, 40, 48, Jain discloses the method of claim 25, wherein a timestamp comprises a clock value and/or a counter value (timestamp counter, col5 lines 58-60).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 28, 29, 38, 39, 46, 47, 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Jain (US 6259677), hereinafter referred to as Jain.

Regarding claim 28, 29, 38, 39, 46, 47, 49, Jain fails to specifically disclose wherein modifying the base time comprises subtracting from the base time the most recently obtained transmission latency/absolute value of the most recently determined transmission latency. Jain however discloses the pseudocode of;

(packet_jitter < 0)

{ fixed_delay = receive_clock - timestamp; (in which Examiner interprets to correlate to base time)


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packet_jitter = 0; (in which the Examiner interprets to correlate to recently obtained  
transmission latency, col6 lines 20-35)  
}
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Thus modifying the base time (fixed_delay) by subtracting from the base time (fixed_delay) the most recently obtained transmission latency (packet_jitter = 0) would simply equal the modified base time

$$(\text{fixed_delay (basetime)} - \text{packet_jitter (transmission latency)}) = \text{fixed_delay.}$$

It would have thus been obvious to a person skilled in the art at the time the invention was made to omit the subtracting from the base time the most recently obtained transmission latency, since Jain discloses that the most recently obtained transmission latency (packet_jitter) to be set to zero, in order to efficiently simplify the pseudocode. Similar rationale is thus applied to the absolute value of the most recently determined transmission latency.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
14. Bordonaro et al. (US 7092410), Method And Apparatus For Measuring Network Data Packet Delay, Jitter, And Loss.
15. Ketcham (US 6212206), Methods And Computer Executable Instructions For Improving Communications In A Packet Switching Network.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NGUYEN NGO** whose telephone number is (571)272-8398. The examiner can normally be reached on **Monday-Friday 7am - 3:30 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571)272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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